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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/535,485	05/17/2005	Deborah Jane Cooke	C4265(C)	3943

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EXAMINER	
KHAN, AMINA S	
ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 07/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/535,485	COOKE ET AL.	
	Examiner	Art Unit	
	Amina Khan	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *5/10/2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5/10/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to applicant's arguments filed on May 10, 2006.

2. Claims 1-10 are pending.

3. Applicant's arguments with respect to the 35 U.S.C. 102(b)/103(a) rejections of claims 21,3-7 and 10 . rejected over Bettiol et al. (WO 00/65015) are persuasive. The rejection of the claims is withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ruppert et al. (US 4,441,881).

Ruppert et al. teaches methods of laundering fabrics comprising contacting fabrics in wash liquors with detergent compositions comprising hydroxyethyl cellulose with a degree of substitution up to 3 and a molecular weight of 19,000 to 185,000 and a nonionic surfactant (column 5, lines 1-51; column 7, lines 30-45). Ruppert et al. further teaches that the detergent compositions comprise up to 1.0% of cellulose ether based

on the total weight of the formulation (column 5, lines 40-46) and the detergents are utilized in a wash liquor at 1.99 grams per liter water (column 8, lines 20-35).

Ruppert et al. is silent as to the color and the luminance of the treated fabrics and does not teach all the instantly claimed components in a single example.

It would have been obvious to one of ordinary skill in the art to apply the laundering methods of Ruppert et al. to black fabric of the claimed luminance values because it routine to launder fabrics of all color types and luminance values in conventional laundering processes utilizing detergents. Furthermore, it would have been obvious to one of ordinary skill in the art to arrive at the instantly claimed invention by choosing the claimed cellulose ethers having the claimed properties and percentages because Ruppert et al. teaches that methods comprising these components and amounts are efficient in providing fabrics with soil shield properties during cleansing processes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch,* 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re*

Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim,* 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff,* 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

All disclosures of the prior art, including non-preferred embodiment, must be considered. See In re Lamberti and Konort, 192 USPQ 278 (CCPA 1967); In re Snow 176 USPQ 328(CCPA 9173). Nonpreferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Kohler,* 177 USPQ 399. A reference is not limited to the working examples, see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982).

6. Claims 1-4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakatani (US 4,450,499).

Sakatani teaches methods of laundering fabrics comprising contacting fabrics in wash liquors with detergent compositions comprising hydroxyethyl cellulose and a cationic surfactant (column 2, lines 10-67; column 7, lines 30-45). Sakatani further teaches that the detergent compositions comprise 0.1-20% of additives based on the weight of quaternary ammonium salt, wherein the quaternary ammonium salt and cellulose derivative may be used in 50/50 proportions (column 3, lines 5-50) and the detergents are utilized in a water wash liquor at 0.13% (column 4, lines 40-50).

Sakatani et al. is silent as to the color and the luminance of the treated fabrics and does not teach all the instantly claimed components in a single example.

It would have been obvious to one of ordinary skill in the art to apply the laundering methods of Sakatani to black fabric of the claimed luminance values because it routine to launder fabrics of all color types and luminance values in conventional laundering processes utilizing detergents. Furthermore, it would have been obvious to one of ordinary skill in the art to arrive at the instantly claimed invention by choosing the claimed cellulose ethers at the claimed percentages because Sakatani teaches that methods comprising these components and amounts are efficient in providing fabrics with excellent soft finishes or touch properties during cleansing processes.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch,* 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges

disclosed by the prior art", see *In re Wertheim,* 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff,* 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

All disclosures of the prior art, including non-preferred embodiment, must be considered. See In re Lamberti and Konort, 192 USPQ 278 (CCPA 1967); In re Snow 176 USPQ 328(CCPA 9173). Nonpreferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1989); *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Kohler,* 177 USPQ 399. A reference is not limited to the working examples, see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982).

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruppert et al. (US 4,441,881) as applied to the claims above, and further in view of Bettiol et al. (WO 00/65015).

Ruppert et al. is relied upon as set forth above.

Ruppert et al. is silent as to the viscosity of the hydroxyethyl cellulose and does not explicitly teach this claimed limitation.

Bettiol et al. teaches methods of treating fabrics with hydroxyethyl cellulose with viscosities of at least 10 cp to provide the fabric with superior soil release properties (column 4, paragraphs 1-3; column 12, paragraph 3; page 18, paragraph 5).

It would have been obvious to one of ordinary skill in the art to modify the methods of Ruppert et al. by incorporating the hydroxyethyl celluloses taught by Bettiol

et al. because Bettiol et al. teaches that these celluloses provide superior soil release properties to fabrics. One of ordinary skill in the art would have been motivated to combines the teachings of the references absent unexpected results.

8. Claims 1,2,8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lähteenmäki et al. (WO 99/61479).

Lähteenmäki et al. teaches methods of laundering fabrics and textiles in washing solutions containing modified cellulose ethers, specifically hydroxyethyl celluloses (page 4, line 11) with molecular weights between 90,000-1,300,000 (page 4, lines 11-12), and surfactants (page 5, lined 14-16) to impart anti-fading benefits (page 5, lines 31-34).

Lähteenmäki et al. is silent about the specific color and luminance of the fabric and does not teach the claimed concentration of a hydroxyl C2-C4 alkyl derivative of a beta 1-4 polysaccharide. Lähteenmäki et al. does not teach all the instantly claimed components in a single embodiment.

One of ordinary skill in the art would have been motivated to use the methods taught by Lähteenmäki et al. to treat fabrics with a luminance less than 50, including black fabrics, because Lähteenmäki teaches methods which provide improved antifading benefits (page 5, paragraph 5, lines 31-35) to the fabrics in general using a similar composition encompassed by the material limitations of the instant claims. Furthermore, it would have been obvious to optimize the concentration of the hydroxyethyl cellulose to 0.1-0.001 g/L to obtain the best results because Lähteenmäki teaches the inclusion of 0.1-5% by weight cellulose based components (page 5, lines

11-13) in detergent compositions which are later diluted in a washing solutions during laundering (page 5, line 31). The resulting wash liquor would be expected to have a similar concentration of hydroxyethyl cellulose. The burden is on the applicant to prove otherwise.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch,* 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim,* 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff,* 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

All disclosures of the prior art, including non-preferred embodiment, must be considered. See In re Lamberti and Konort, 192 USPQ 278 (CCPA 1967); In re Snow 176 USPQ 328(CCPA 9173). Nonpreferred embodiments can be indicative of obviousness, see *Merck & Co. v. Biocraft Laboratories Inc.* 10 USPQ 2d 1843 (Fed. Cir.

1989); *In re Lamberti*, 192 USPQ 278 (CCPA 1976); *In re Kohler,* 177 USPQ 399. A reference is not limited to the working examples, see *In re Fracalossi*, 215 USPQ 569 (CCPA 1982).

Response to Arguments

9. Applicant's arguments regarding the Lähteenmäki et al. as they apply to the rejection above have been fully considered but they are not persuasive.

The applicant argues:

"WO 99/61479 relates to laundry detergents which contain hydrophobically modified cellulose ether polymers (see page 1, lines 4-5). The cellulose ethers of the present invention can be regarded as unmodified cellulose ethers, whereas the cellulose ethers of WO 99/61479 have been modified with a hydrophobic agent."

The examiner asserts that there is nothing in the instant claims that excludes the inclusion of modified hydroxyethyl cellulose ethers. The rejection is maintained.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amina Khan whose telephone number is (571) 272-5573. The examiner can normally be reached on Monday through Friday, 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Amina Khan
Patent Examiner
July 15, 2006

LORNA M. DOUYON
PRIMARY EXAMINER